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Canine Pyloric Stenosis

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Figure 1. Radiograph.

On November 8 the dog was anesthetized with morphine and sodium pentobarbital and the surgical field was aseptically prepared. A Kirschner external fixation apparatus was used. Two pins were placed in each ilium and two pins were placed in each ischium. Cross bars were attached connecting the two bars of the ilia and the two bars of the ischia. Other cross bars were used to connect the ilium with the ischium on each side, and then to connect the ilium of one side with that of the other and the ischium of one side with that of the other. Examination per rectum revealed fairly good allignment of the pelvis.

On the day following surgery the dog was standing and bearing weight on his hind legs, for the first time since entry into the clinic (Fig. 2).

A penicillin-streptomycin mixture was given for 4 days (1 cc. b.i.d.). A vitamin and mineral mixture and an amino acid concentrate was given daily in the feed for the next 2 weeks.

The dog started walking the second day after surgery and made an uneventful recovery. The elbow stitches were removed in 10 days. The pins were removed on November 29 and the dog was discharged on November 30, showing no external evidence of former injury.

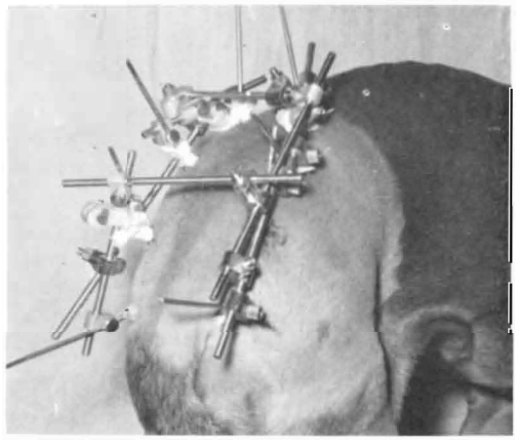

Figure 2. External fixation.

This case report is entered to illustrate the excellent functional results which may be obtained by the use of external pinning methods in the treatment of fractures of the canine pelvis.

— Bruce Rosenquist '58

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6 **Canine Pyloric Stenosis.** Pyloric stenosis arises from muscular hypertrophy and is considered to be congenital. According to Secord, it is seen most frequently in Boxer and Boston Terrier puppies.

A typical picture of pyloric stenosis was presented by a 11-week old female Boston terrier, admitted to Stange Memorial Clinic on Nov. 4, 1957.

The patient had a history of persistent vomiting which dated back to early puppyhood. Some fluids were retained, but solid food was vomited soon after ingestion.

A tentative clinical diagnosis of pyloric stenosis was made on history and symptoms. Fluoroscopic examination further strengthened the diagnosis as the patient was noted to have delayed emptying of

the stomach; ¾ oz. barium sulfate administered was still in the stomach at 45 minutes. In a normal dog this should be mostly evacuated in 20 minutes.

The clinical diagnosis was confirmed by exploratory laparotomy. A laparotomy incision was made ½ inch posterior to the xiphoid cartilage to a point 1 inch posterior to the umbilicus. The pylorus was brought to the exterior and found to be enlarged and firm. A ½-inch, longitudinal incision was made through the serosa and muscularis over the stenotic area. This was extended by careful blunt dissection down *to* the mucosa. The mucosa was not penetrated. The pyloric incision was *not* sutured, allowing the mucosa to bulge and permitting normal emptying of the stomach. The laparotomy incision was closed with a row of simple interrupted sutures placed through the rectus sheath and peritoneum, and one row of simple continuous placed in the subcutaneous tissue. The skin was closed using a single row of interrupted sutures of Vetafil® (synthetic suture) and a roller bandage applied to the area.

Two days postoperative the incision edges pulled apart, requiring that the patient be reanesthetized and closure repeated. This points up a situation that should be emphasized. Most of the patients prior to surgery are on a starvation diet and may be deficient in protein, which will cause delayed wound healing and wound disruption. To prevent this, extra supporting stay sutures should be placed so that the incision will be held in apposition until primary union occurs.

The patient was fed a semiliquid, high protein diet for about 2 weeks (Kings Fare and condensed milk 2:1) and was then changed to canned dog food. Some fluids were administered postoperatively as indicated (whole blood transfusion, 5% dextrose, B vitamins, and amino acids).

After the operation the vomiting ceased, and after the nutrition was corrected, the patient made a complete recovery and was discharged Dec. 4, 1957.

— Durwood Davis '59